



SCREENING DECISION REPORT
NIRB FILE NO.: 10EN013

INAC File No: N2010C0003

May 13, 2010

Honourable Chuck Strahl
Minister of Indian and Northern Affairs Canada
Indian and Northern Affairs Canada
Gatineau, QC

Via email: Strahl.C@parl.gc.ca

Re: Screening Decision for Commander Resources Ltd.'s "Storm Project" Project Proposal.

Dear Honourable Chuck Strahl:

The primary objectives of the Nunavut Impact Review Board (NIRB) are set out in Section 12.2.5 of the Nunavut Land Claims Agreement (NLCA) as follows:

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area.

Section 12.4.4 of the NLCA states:

Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

- a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;*
- b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;*
- c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or*
- d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.*

NIRB ASSESSMENT AND DECISION

After a thorough assessment of all material provided to the Board (please see *Procedural History* and *Project Activities* in **Appendix A**), in accordance with the principles identified within Section 12.4.2 of the NLCA, the decision of the Board as per Section 12.4.4 of the NLCA is:

12.4.4 (a): the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5.

RECOMMENDED PROJECT-SPECIFIC TERMS AND CONDITIONS (pursuant to Section 12.4.4(a) of the NLCA)

The Board is recommending that the following or similar project-specific terms and conditions be imposed upon the Proponent through all relevant legislation:

General

1. Commander Resources Ltd. (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
3. The Proponent shall operate in accordance with all commitments stated in correspondences provided to the NIRB (NIRB Part 2 Form- Project Specific Information Requirements, dated March 30, 2010); to Indian and Northern Affairs Canada (Land Use Permit Application, dated February 15, 2010); and to the Nunavut Planning Commission (Application to Determine Conformity of North Baffin Regional Land Use Plan, dated February 22, 2010).
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water

5. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams shall not be used for water withdrawal.
6. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

Waste

7. The Proponent shall incinerate all combustible wastes daily, and remove the ash from incineration activities and non-combustible wastes from the project site to an approved facility for disposal.
8. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of at an approved facility. All wastes shall be kept inaccessible to wildlife at all times.

9. The Proponent shall ensure that the disposal of combustible camp wastes comply with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for Mercury*.
10. The Proponent shall ensure that no waste oil/grease will be incinerated on site. All waste oil/grease must be transported off site and disposed of at an approved facility.

Fuel and Chemical Storage

11. The Proponent shall locate all fuel and other hazardous materials a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
12. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
13. The Proponent shall use secondary containment or a surface liner (self-supporting instalberms, fold-a-tanks, etc), when storing barreled fuel and chemicals on all locations rather than relying on natural depressions.
14. The Proponent shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, absorbents, etc) must be readily available during any transfer of fuel or hazardous substances, as well as at vehicle-maintenance areas and at drill sites.
15. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site.
16. The Proponent shall ensure that all on site personnel are properly trained in fuel and hazardous waste handling procedures as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130.

Wildlife

17. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
18. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
19. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.
20. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups (colonies) of migratory birds. It is recommended aircraft avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.
21. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.

22. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance (e.g., establish an appropriate buffer zone around the nests). If active nests of any birds are discovered (i.e. with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest. The Proponent should treat all nest sites with equal precaution, regardless of the response of the bird. Do not disturb raptor nests during conditions of poor weather (rain, snow, high winds).
23. During the period of May 15 to July 15 when caribou are observed within 1 km of project operations, the Proponent shall suspend all operations, including low-level over flights, blasting, and use of snow mobiles and all terrain vehicles outside the immediate vicinity of the camps. Following July 15, if caribou cows or calves are observed within 1 km of project operations, the Proponent shall also suspend all operations in the vicinity, including low-level over flights, blasting, and use of snow mobiles and all terrain vehicles, until caribou are no longer in the immediate area.
24. Prior to significant operational movements (e.g. before moving drill rigs), the proponent should undertake high altitude (>610 m) aerial reconnaissance with the assistance of an independent wildlife monitor, to determine whether caribou cows and calves are present within a 20 km radius of the camp or drill sites, or if caribou are migrating close by. If caribou are observed the monitor will instruct the proponent to suspend any activities within 10 km of the sightings.
25. The Proponent shall cease activities that may interfere with migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.
26. The Proponent shall ensure that all project personnel are made aware of the measures to protect wildlife and are provided with training and/or advice on how to implement these measures. The Proponent shall also advise all pilots of relevant flight restrictions and enforce their application over the project area and flight paths to/from the project area.

Drilling

27. The Proponent shall not conduct any land based drilling or mechanized clearing within thirty-one (31) metres of the normal high water mark of a water body.
28. The proponent shall ensure that, should calcium chloride (CaCl) be used as a drill additive, all sumps containing CaCl will be properly constructed and located in such a manner as to ensure that the contents will not enter any water body.
29. If an artesian flow is encountered, the Proponent shall ensure the drill hole is immediately plugged and permanently sealed.
30. The Proponent shall ensure that all drill areas are constructed to facilitate minimizing the environmental footprint of the project area. Drill areas should be kept orderly with garbage removed daily to an approved disposal site.
31. The Proponent shall ensure that all sump/depression capacities are sufficient to accommodate the volume of waste water and any fines that are produced. The sumps shall only be used for inert drilling fluids, and not any other materials or substances.

32. The Proponent shall ensure all drill holes are backfilled or capped prior to the end of each field season. The Proponent shall ensure that all sumps are backfilled and restored to original and/or stable profile prior to the end of each field season.

Camp and Physical Environment

33. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.
34. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. The Proponent shall suspend overland travel of equipment or vehicles if rutting occurs.
35. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

Restoration

36. The Proponent shall complete all clean-up and restoration of the lands used prior to the end of each field season and/or upon abandonment of site.

Other

37. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.
38. Any activity related to this application, and outside the original scope of the project as described in the application, will be considered a new project and should be submitted to the NIRB for Screening.

MONITORING AND REPORTING REQUIREMENTS

In addition, the Board is recommending the following:

1. The Proponent shall submit an annual report with copies provided to the NIRB, Indian and Northern Affairs Canada (INAC) by March 31 each year that the project is in operation. The report must contain, but not be limited to, the following information:
 - a. A summary of activities undertaken for the year, including the amount of drilling;
 - b. A work plan for the following year;
 - c. Wildlife record log;
 - d. Wildlife monitoring /mitigation measures taken in the reporting year, and additional measures identified to be implemented in the following year;
 - e. The number of take-offs & landings of aircraft and their flight path with date and location;
 - f. The number of helicopter touch-downs on the land with date and location (provide unless confidential);
 - g. Site photos;
 - h. Progressive reclamation work undertaken;
 - i. Amount of waste removed from the site and location of disposal site; and
 - j. A summary of how the proponent has complied with all project terms and conditions and how the terms and conditions are achieving their purpose.

2. The wildlife record log required in the annual report should include but is not limited to the following information items:
 - a. Record of wildlife observations while operating within the project area. The record should include locations (i.e., latitude and longitude), species, number of animals, a description of the animal activity, and a description of the gender and age of animals if possible.
 - b. Map of the location of any sensitive wildlife sites such as denning sites, calving areas, caribou crossing sites, and raptor nests in the project area, prior to conducting the project activities.
 - c. The timing of critical life history events (i.e., calving, mating, denning and nesting) within the project area.
 - d. Potential impacts from the project, and ensure that operational activities are managed and modified to avoid impacts on wildlife and sensitive sites.

A copy of this wildlife record log should be submitted annually at the end of the operational season to the following Government of Nunavut – Department of Environment contacts:

- a. Regional Manager, Wildlife, Seeglook Akeeagok, (867) 975-7800, akeeagok@gov.nu.ca
- b. Biologist, Baffin Region, Debbie Jenkins, (867) 899-8876, pondbiologist@qiniq.com

OTHER NIRB CONCERNS AND RECOMMENDATIONS

In addition to the project-specific terms and conditions, the Board is recommending the following:

General

All Authorizing Agencies shall notify the NIRB of any changes in operating plans or conditions associated with this project prior to any such change.

The Proponent

1. The Proponent review the bear/carnivore detection and deterrent techniques outlined in “Safety in Grizzly and Black Bear Country” which can be down-loaded from this link: <http://www.nwtwildlife.com/Publications/safetyinbearcountry/safety.htm>. Note that some recommendations in this manual are also relevant to polar bears. There is a DVD about polar bears and safety available from Nunavut Parks at the following link <http://www.nunavutparks.com/english/visitor-information/suggested-resources.html> and a “Safety in Polar Bear Country” pamphlet from Parks Canada at the following link <http://www.pc.gc.ca/pn-np/nu/auyuittuq/pdf/PolarBearEnglish2007final.pdf>.
2. The Proponent shall take all possible measures to avoid wildlife encounters. Any problem wildlife (e.g., nuisance), wildlife kill, wildlife attacked., should be reported immediately to the Government of Nunavut, Department of Environment at:
 - a. Regional Manager, Wildlife, Seeglook Akeeagok, (867) 975-7800, akeeagok@gov.nu.ca
 - b. Biologist, Baffin Region, Debbie Jenkins, (867) 899-8876, pondbiologist@qiniq.com

- c. Wildlife Deterrent Specialist, Sarah Medill (867) 934-4335, smedill@gov.nu.ca
3. The Proponent shall update its Spill Contingency Plan to include the following information:
- a. The Spill Contingency Plan should be updated with a current project map and should include locations of all spill kits on site.
 - b. The requirement of a Waste Manifest for all waste movements, and its registration contact: Robert Eno at (867)975-7729 or reno@gov.nu.ca.
4. A waste manifest must accompany the shipment of all waste oil/grease and the proponent must register with the Government of Nunavut – Department of Environment (GN-DoE). Contact the Manager of Pollution Control and Air Quality at (867) 975-7748 to obtain a manifest if hazardous waste is generated during project activities.
5. The Proponent review Environment Canada’s (EC) “Technical Document for Batch Waste Incineration”, available at the following link: <http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1>. This technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting and should be incorporated into an incineration management plan for the project and submitted to EC for review prior to implementation.
6. Raw sewage should not be burned in batch incinerators that are typically used in the north, but in incineration equipment designed for this type of waste. If Commander decides to pursue sewage sludge incineration, it should provide the NIRB with the information to verify the suitability of chosen incinerator in such a use.
7. The Proponent should ensure that an archaeological reconnaissance or inventory pursuant to CLEY’s “Guidelines for Developers” (attached as **Appendix B**) is conducted by a professional archaeologist holding a valid Nunavut archaeological permit prior to lands being disturbed.

Indian and Northern Affairs Canada

1. Indian and Northern Affairs Canada (INAC) impose mitigation measures, conditions and monitoring requirements pursuant to the Federal Land Use Permit, which require the Proponent to respect the sensitivities and importance of the area. These mitigation measures, conditions and monitoring requirements should be in regard to the location and area; type, location, capacity and operation of facilities; use, storage, handling and disposal of chemical or toxic material; wildlife and fisheries habitat; and petroleum fuel storage.
2. INAC Water Resources should consider the importance of conducting regular inspections, pursuant to the authority of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, while the project is in operation. The inspectors should focus on ensuring the Proponent is in compliance with the conditions imposed through the Water Licence.

Nunavut Water Board

The Nunavut Water Board (NWB) impose mitigation measures, conditions and monitoring requirements pursuant to the Water Licence, which require the Proponent to respect the

sensitivities and importance of water in the area. These mitigation measures, conditions and monitoring requirements should be in regard to use of water, snow and ice; waste disposal; access infrastructure and operation for camps; drilling operations; spill contingency planning; abandonment and restoration planning; and monitoring programs.

REGULATORY REQUIREMENTS

The Proponent is also advised that the following legislation may apply to the project:

1. The Proponent is advised that the *Canadian Environmental Protection Act* (<http://laws.justice.gc.ca/en/C-15.31/>) lists calcium chloride (CaCl) as a toxic substance. The Proponent should assess alternatives (including biodegradable and non-toxic) to drill additives prior to the use of CaCl and try to avoid the use of CaCl.
2. The *Fisheries Act* (<http://laws.justice.gc.ca/en/showtdm/cs/F-14///en>).
3. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (<http://www.canlii.org/ca/sta/n-28.8/whole.html>).
4. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (<http://laws.justice.gc.ca/en/showtdm/cs/M-7.01>).
5. The *Species at Risk Act* (<http://laws.justice.gc.ca/en/showtdm/cs/S-15.3>). Attached in **Appendix C** is a list of Species at Risk in Nunavut.
6. The *Nunavut Wildlife Act* which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.
7. The *Nunavut Act* (<http://laws.justice.gc.ca/en/showtdm/cs/N-28.6>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix D**.
8. The *Transportation of Dangerous Goods Regulations*, *Transportation of Dangerous Goods Act* (<http://www.tc.gc.ca/tdg/menu.htm>), and the *Environmental Protection Act* (<http://laws.justice.gc.ca/en/C-15.31/text.html>) The Proponent must ensure that proper shipping documents accompany all movements of dangerous goods. The Proponent must register with the GN-DOE Manager of Pollution Control and Air Quality at 867-975-7748.
9. The *Aeronautics Act* (<http://laws.justice.gc.ca/en/A-2/>).

Validity of Land Claims Agreement

Section 2.12.2

Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated May 13, 2010 at Cambridge Bay, NU.



Henry Ohokannoak, Acting Chairperson
for Lucassie Arragutainaq, Chairperson

Attachments: Appendix A: Procedural History and Project Activities
Appendix B: Guidelines for Developers - the Protection of Archaeological Resources
Appendix C: Species at Risk in Nunavut
Appendix D: Archaeological and Palaeontological Resources Terms and Conditions for Land Use
Permit Holders

Appendix A

Procedural History and Project Activities

Procedural History

On February 15, 2010 the NIRB received Commander Resources Ltd.'s (Commander or the Proponent) "Storm Project" project proposal from Indian and Northern Affairs Canada (INAC). On February 22, 2010 the NIRB received a positive conformity determination (North Baffin Regional Land Use Plan) from the Nunavut Planning Commission for this file. The NIRB assigned this project proposal file number 10EN013.

Following a preliminary completeness check, the NIRB determined that this project proposal did not contain sufficient information to permit proper screening. Therefore, on March 24, 2010 the NIRB requested Commander to submit additional project-specific information by April 6, 2010. On March 30, 2010 the NIRB received the required information from the Proponent and commenced screening the proposal.

This project proposal was distributed to community organizations in Resolute, as well as to relevant federal and territorial government agencies, and Inuit organizations. The NIRB requested that interested parties review the proposal and the NIRB's proposed project-specific terms and conditions and provide the Board with any comments or concerns by April 22, 2010 regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects; and if so, why;
- Whether the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (providing any recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

On or before April 22, 2010, the NIRB received comments from the following interested parties :

- The Government of Nunavut – Culture Language Elders and Youth (GN-CLEY)
- The Government of Nunavut, Department of Environment (GN-DoE)
- Environment Canada (EC)
- Transport Canada (TC)

All comments provided to NIRB regarding this project proposal can be viewed on NIRB's ftp-site, at the following

location: <http://ftp.nirb.ca/SCREENINGS/COMPLETED%20SCREENINGS/>

Project Activities

The "Storm" Project is located at the northern part of Somerset Island within the Qikiqtani Region of Nunavut, approximately 112 km south of the community of Resolute. The Proponent

intends to conduct airborne geophysical surveys and a preliminary mineral exploration drilling program, potentially followed by a diamond drilling program depending upon the results of the early stage exploration. The proposed project activities are planned to take place from August 1, 2010 to July 31, 2012.

The project activities include:

- Setup and operation of 12-person temporary tent camp;
- Incineration of sewage and combustible solid waste;
- Fuel storage;
- Use of helicopter and fixed wing aircraft for field pickups and drop offs, and transport of supplies;
- Percussion drilling;
- Potential diamond drilling;
- Ground and airborne geophysical survey; and
- Waster use and waste disposal.

Appendix B
Guidelines for Developers - the Protection of Archaeological Resources

GUIDELINES FOR DEVELOPERS FOR THE PROTECTION OF ARCHAEOLOGICAL RESOURCES IN THE NUNAVUT TERRITORY

Introduction

The following guidelines have been formulated to ensure that the impacts of proposed developments upon heritage resources are assessed and mitigated before ground surface altering activities occur. Heritage resources are defined as, but not limited to, archaeological and historical sites, burial grounds, palaeontological sites, historic buildings and cairns. Effective collaboration between the developer, the Department of Culture, Language, Elders and Youth (CLEY), and the contract archaeologist(s) will ensure proper preservation of heritage resources in the Nunavut Territory. The roles of each are briefly described.

The Department of Culture, Language, Elders and Youth (CLEY) is the Nunavut Government agency which oversees the protection and management of heritage resources in Nunavut, in partnership with land claim authorities, regulatory agencies, and the federal government. Its role in mitigating impacts of developments on heritage resources is: to identify the need for an impact assessment and make recommendations to the appropriate regulatory agency; set the terms of reference for the study depending upon the scope of the development; suggest the names of qualified individuals prepared to undertake the study to the developer; issue an archaeologist or palaeontologist permit authorizing field work; assess the completeness of the study and its recommendations; ensure that the developer complies with the recommendations.

The primary regulatory agencies that the Department of Culture, Language, Elders and Youth provides information and assistance to are the Nunavut Impact Review Board, for development activities proposed for Inuit Owned Lands (as defined in Section 1.1.1 of the Nunavut Land Claims Agreement), and the Department of Indian and Northern Affairs for development activities proposed for federal Crown Lands.

A developer is the initiator of a land use activity. It is the obligation of the developer to ensure that

a qualified archaeologist or palaeontologist is hired to perform the required study and that provisions of the contract with the archaeologist or palaeontologist allow permit requirements to be met; i.e. fieldwork, collections management, artifact and specimen conservation, and report preparation. On the recommendation of the contract archaeologist or palaeontologist in the field and the Government of Nunavut, the developer shall implement avoidance or mitigative measures to protect heritage resources or to salvage the information they contain through excavation, analysis, and report writing. The developer assumes all costs associated with the study in its entirety.

Through his or her active participation and supervision of the study, the contract archaeologist or palaeontologist is accountable for the quality of work undertaken and the quality of the report produced. Facilities to conduct fieldwork, analysis, and report preparation should be available to this individual through institutional, agency, or company affiliations. Responsibility for the curation of objects recovered during field work while under study, and for documents generated in the course of the study as well as remittance of artifacts, specimens and documents to the repository specified on the permit accrue to the contract archaeologist or palaeontologist. This individual is also bound by the legal requirements of the Nunavut Archaeological and Palaeontological Sites Regulations.

Types of Development

In general, those developments that cause concern for the safety of heritage resources will include one or more of the following kinds of surface disturbances. These categories, in combination, are comprehensive of the major kinds of developments commonly proposed in Nunavut. For any single development proposal, several kinds of these disturbances may be involved.

- *Linear disturbances: including the construction of highways, roads, winter roads, transmission lines, and pipelines;*
- *Extractive disturbances: including mining, gravel removal, quarrying, and land filling;*
- *Impoundment disturbances: including dams, reservoirs, and tailings ponds;*
- *Intensive land use disturbances: including industrial, residential, commercial, recreational, and land reclamation work, and use of heritage resources as tourist developments.*
- *Mineral, oil and gas exploration: establishment of camps, temporary airstrips, access routes, well sites, or quarries all have potential for impacting heritage resources.*

Types of Studies Undertaken to Preserve Heritage Resources

Overview: An overview study of heritage resources should be conducted at the same time as the development project is being designed or its feasibility addressed. They usually lack specificity with regard to the exact location(s) and form(s) of impact and involve limited, if any, field surveys. Their main aim is to accumulate, evaluate, and synthesize the existing knowledge of the heritage of the known area of impact. The overview study provides managers with baseline data from which recommendations for future research and forecasts of potential impacts can be made. A Class 1 Permit is required for this type of study if field surveys are undertaken.

Reconnaissance: This is done to provide a judgemental appraisal of a region sufficient to provide the developer, the consultant, and government managers with recommendations for further development planning. This study may be implemented as a preliminary step to inventory and assessment investigations except in cases where a reconnaissance may indicate a very low or negligible heritage resource potential. Alternately, in the case of small-scale or linear developments, an inventory study may be recommended and obviate the need for a

reconnaissance.

The main goal of a reconnaissance study is to provide baseline data for the verification of the presence of potential heritage resources, the determination of impacts to these resources, the generation of terms of reference for further studies and, if required, the advancement of preliminary mitigative and compensatory plans. The results of reconnaissance studies are primarily useful for the selection of alternatives and secondarily as a means of identifying impacts that must be mitigated after the final siting and design of the development project. Depending on the scope of the study, a Class 1 or Class 2 Permit is required for this type of investigation.

Inventory: A resource inventory is generally conducted at that stage in a project's development at which the geographical area(s) likely to sustain direct, indirect, and perceived impacts can be well defined. This requires systematic and intensive fieldwork to ascertain the effects of all possible and alternate construction components on heritage resources. All heritage sites must be recorded on Government of Nunavut Site Survey forms. Sufficient information must be amassed from field, library and archival components of the study to generate a predictive model of the heritage resource base that will:

- allow the identification of research and conservation opportunities;
- enable the developer to make planning decisions and recognize their likely effects on the known or predicted resources; and,
- make the developer aware of the expenditures, which may be required for subsequent studies and mitigation. A Class 1 or 2 permit is required.

Assessment: At this stage, sufficient information concerning the numbers and locations of heritage resources will be available, as well as data to predict the forms and magnitude of impacts. Assessments provide information on the size, volume, complexity and content of a heritage resource, which is used to rank the values of different sites or site types given current archaeological knowledge. As this information will shape subsequent mitigation program(s), great care is necessary during this phase.

Mitigation: This refers to the amelioration of adverse impacts to heritage resources and involves the avoidance of impact through the redesign or relocation of a development or its components; the protection of the resource by constructing physical facilities; or, the scientific investigation and recovery of information from the resource by excavation or other method. The type(s) of appropriate mitigative measures are dictated by their viability in the context of the development project. Mitigation strategies must be developed in consultation with, and approved by, the Department of Culture, Language, Elders and Youth. It is important to note that mitigation activities should be initiated as far in advance of the construction of the development as possible.

Surveillance and monitoring: These may be required as part of the mitigation program.

Surveillance may be conducted during the construction phase of a project to ensure that the developer has complied with the recommendations.

Monitoring involves identification and inspection of residual and long-term impacts of a development (i.e. shoreline stability of a reservoir); or the use of impacts to disclose the presence of heritage resources, for example, the uncovering of buried sites during the construction of a pipeline.

Reporting Procedures

By law, a holder of a Nunavut Archaeologist or Palaeontologist Permit must submit a report on the work performed by March 31 of the year following that in which the permit was issued. Section 14 of the Nunavut Archaeological and Palaeontological Sites Regulations provides details of reporting requirements for both Class 1 and Class 2 permits, and identifies the agencies to which copies of the report must be submitted.

This report should document the baseline archaeological or palaeontological information recovered in the course of the project, in the context of the proposed developments with which they are associated. If possible, anticipated impacts of the development on heritage resources should be addressed. This information must be forthcoming in time for mitigation studies and

programs to be implemented.

The Department of Culture, Language, Elders and Youth must receive permit applications a minimum of 90 days in advance of the proposed start date for the study. In some cases, additional time may be required to complete the permit review process. The Department of Culture, Language, Elders and Youth sends copies of the application to appropriate organizations for comment. Under the provisions of Article 33 of the Nunavut Land Claims Agreement, copies of archaeology permit applications are sent to the Inuit Heritage Trust for review.

Archaeological and palaeontological fieldwork in Nunavut can normally only take place between late June and early September, depending on weather conditions, and it is important that project planning take this fact into consideration. Field reconnaissance, inventories, and testing or excavation programs can only be undertaken under snow-free conditions.

Summary of Legislation Protecting Heritage Resources in Nunavut

The *Nunavut Archaeological and Palaeontological Sites Regulations*, pursuant to the *Nunavut Act*, apply throughout Nunavut and state:

Archaeology:

4. No person shall search for archaeological sites or archaeological artifacts, or survey an archaeological site, without a Class 1 or Class 2 permit.

5(1). No person shall excavate, alter or otherwise disturb an archaeological site, or remove an archaeological artifact from an archaeological site, without a Class 2 permit.

Palaeontology:

6. No person shall search for palaeontological sites or fossils, or survey a palaeontological site, without a Class 1 or Class 2 permit.

7. No person shall excavate, alter or otherwise disturb a palaeontological site, or remove a fossil from a palaeontological site, without a Class 2 permit.

On federal Crown Land, the **Territorial Land Use Regulations**, pursuant to the *Territorial Lands Act*, also apply. Two sections are relevant to archaeological sites:

10(a). No permittee shall, unless expressly authorized in his permit or expressly authorized in writing by an inspector conduct a land use operation within 30 metres of a known monument or a known or suspected archaeological site or burial ground; and

16. Where, in the course of a land use operation, a suspected archaeological site or burial ground is unearthed or otherwise discovered, the permittee shall immediately:

- suspend the land use operation on the site; and
- notify the engineer or an inspector of the location of the site and the nature of any unearthed materials, structures or artifacts.

Development activities near archaeological sites are also regulated by the **Canada Oil and Gas Geophysical Operations Regulations** of the *Canada Oil and Gas Operations Act*.

27. (1) Where an archaeological site or a burial ground is discovered during an onshore geophysical operation, the operator shall so inform a conservation officer and suspend the operation in the immediate area of the discovery until permitted by the conservation officer to resume the operation in that area.

(2) A conservation officer shall permit the resumption of a geophysical operation that was suspended under subsection (1) if the conservation officer, after consultation with the Minister of Communications, is satisfied that the operation will not disturb the archaeological site or the burial ground and will not affect the archaeological or other special characteristics or the nature of the site or ground.

The *Historical Resources Act* (Territorial) pertains to Commissioner's Land. Protection of sites in these areas is afforded by:

9(1). Whenever, in the opinion of the Commissioner, any prehistoric or historic remains, whether or not designated as an historic place under this ordinance or under the Historic Sites and Monuments Act of Canada is threatened with destruction by reason of commercial, industrial, mining, mineral exploration or other activity, the Commissioner may order the persons undertaking the activity to provide for adequate investigation, recording and salvage of prehistoric or historic objects threatened with destruction.

Appendix C

Species At Risk in Nunavut

This list includes species listed on one of the Schedules of SARA (*Species at Risk Act*) and under consideration for listing on Schedule 1 of SARA. These species have been designated as at risk by COSEWIC (Committee on the Status of Endangered Wildlife in Canada). This list may not include all species identified as at risk by the Territorial Government.

- Schedule 1 is the official legal list of Species at Risk for SARA. SARA applies to all species on Schedule 1. The term “listed” species refers to species on Schedule 1.
- Schedule 2 and 3 of SARA identify species that were designated at risk by the COSEWIC prior to October 1999 and must be reassessed using revised criteria before they can be considered for addition to Schedule 1.
- Some species identified at risk by COSEWIC are “pending” addition to Schedule 1 of SARA. These species are under consideration for addition to Schedule 1, subject to further consultation or assessment.

Schedules of SARA are amended on a regular basis so it is important to periodically check the SARA registry (www.sararegistry.gc.ca) to get the current status of a species.

Updated: August 4, 2009

Species at Risk	COSEWIC Designation	Schedule of SARA	Government Organization with Lead Management Responsibility ¹
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered	Schedule 1	EC
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Rusty Blackbird	Special Concern	Schedule 1	Government of Nunavut
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Peregrine Falcon (<i>anatum-tundrius</i> complex)	Special Concern	Schedule 1 (<i>anatum</i>) Schedule 3 (<i>tundrius</i>)	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Peary Caribou	Endangered	Pending	Government of Nunavut
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Red Knot (<i>rufa</i> subspecies)	Endangered	Pending	EC

Beluga Whale (Cumberland Sound population)	Threatened	Pending	DFO
Atlantic Cod (Arctic population)	Special Concern	Pending	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Beluga Whale (Eastern High Arctic – Baffin Bay population)	Special Concern	Pending	DFO
Bowhead Whale (Eastern Canada – West Greenland population)	Special Concern	Pending	DFO
Killer Whale (Northwest Atlantic / Eastern Arctic populations)	Special Concern	Pending	DFO
Porsild's Bryum	Threatened	Pending	Government of Nunavut
Atlantic Walrus	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO
Red Knot (<i>islandica</i> subspecies)	Special Concern	Pending	EC
Horned Grebe (Western population)	Special Concern	Pending	EC
Barren-ground Caribou (Dolphin and Union population)	Special Concern	Pending	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Polar Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut

¹ Environment Canada (EC) has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency. The Department of Fisheries and Oceans (DFO) has responsibility for management of aquatic species.

Appendix D
Archaeological and Palaeontological Resources Terms and Conditions
for Land Use Permit Holders



BACKGROUND: Archaeology

As stated in Article 33 of the Nunavut Land Claims Agreement:

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [33.2.5]

BACKGROUND: Palaeontology

Under the Nunavut Act¹, the federal Government can make regulations for the protection, care and preservation of palaeontological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*², it is illegal to alter or disturb any palaeontological site in Nunavut unless permission is first granted through the permitting process.

Definitions

¹ s. 51(1)

² P.C. 2001-1111 14 June, 2001

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

“archaeological site” means a place where an archaeological artifact is found.

“archaeological artifact” means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

“palaeontological site” means a site where a fossil is found.

“fossil” includes:

- (a) natural casts
- (b) preserved tracks, coprolites and plant remains; and
- (c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.

Terms and Conditions

- 1) The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 2) The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 3) The permittee shall immediately contact the Department of Culture, Language, Elders and Youth (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035 should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.
- 4) The permittee shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation, until permitted to proceed with the authorization of the Department of Culture, Language, Elders and Youth, Government of Nunavut.
- 5) The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.
- 6) The permittee shall provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.

- 7) The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.
- 8) The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.
- 9) The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth:
 - a. survey
 - b. inventory and documentation of the archaeological or palaeontological resources of the land use area
 - c. assessment of potential for damage to archaeological or palaeontological sites
 - d. mitigation
 - e. marking boundaries of archaeological or palaeontological sites
 - f. site restoration

The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.